the network of all other local exchange carriers offering service to end users.

- (b) Beginning no later than March 31, 1997, all local exchange carriers shall begin implementing permanent local telephone number portability without interruption of service to their end users according to any method meeting the following criteria:
 - (1) Compatibility with database solutions;
 - (2) IN or AIN feature triggering
 - (3) Preservation of full feature interactions, including all SS-7 based functionalities
 - (4) Efficient allocation of access revenues;
 - (5) Provisions for ten digit routing; and
 - (6) N-1 call processing scenario.

Such implementation shall be completed by December 31, 1998. Each local exchange carrier shall provide permanent local telephone number portability arrangements to other local exchange carriers at no charge, except for processing charges associated with authorized collect, calling card, and third-number billed calls billed to retained numbers.

- (c) Prior to the implementation of permanent local telephone number portability, all local exchange carriers shall offer interim local telephone number portability as follows:
 - (1) Upon receipt of a signed letter of agency from an end user and an associated service

order requesting the assignment of the telephone number to another local exchange carrier (the "receiving carrier"), a local exchange carrier shall promptly forward all calls to the end user's telephone number to the telephone number designated by the receiving carrier. The receiving carrier shall implement such requests in the same time frame and under the same quality standards as it treats its own operations.

- (2) A local exchange carrier that has received such request (the "forwarding carrier") shall route forwarded traffic to a receiving carrier in a manner that does not degrade the quality or functionality of the call and that minimizes any delay in call set-up.
- (3) The receiving carrier shall become the customer of record for the forwarding carrier's forwarded telephone numbers. A forwarding carrier shall provide the receiving carrier with a single consolidated billing statement for all collect, calling card, and 3rd-number billed calls associated with those numbers, with sub-account detail by retained number. Such billing statement shall be delivered either by electronic data transfer, daily magnetic tape, or monthly magnetic tape, as the

receiving carrier requires.

- (4) As directed by the receiving carrier, the forwarding carrier shall update its Line Information Database listings for retained numbers, and restrict or cancel calling cards, associated with the forwarded numbers.
- (5) Within two business days after receiving notification from an end user, the receiving carrier shall notify a forwarding carrier of the end user's termination of service and of the end user's instructions regarding telephone numbers. The forwarding carrier shall, pursuant to the end user's instructions, reinstate service to that end user, cancel the interim local telephone number portability arrangements for that end user's telephone numbers, or redirect the interim local telephone number local telephone number portability arrangements to another receiving local exchange carrier.
- (6) The forwarding carrier shall forward to the receiving carrier any access charges received from any interexchange carrier for calls routed to the receiving carrier's end user.

(d) Cost Recovery

(1) A telecommunications carrier shall bear its own internal costs of implementing permanent number portability, and may not recover those via a

- specific end user rate element identified solely for recovery of such costs.
- (2) Third party services required for implementation of permanent number portability must be provisioned by a neutral, open bid process.
- (3) No telecommunications carrier is entitled to assess any interstate or intrastate access charges based soley on its participation in completing a call using a permanent number portability arrangement. The ability to assess and collect access charges is solely the responsibility and right of the carrier who services the end user.
- (4) Except for authorized collect, calling card, and 3rd-number billed calls billed to retained numbers, a forwarding carrier may charge a receiving carrier directly or indirectly for interim number portability only if the interim service preserves the same functionalities provided to numbers that are not ported, including, but not limited to, SS-7 based services and 911 or E911.

**.302 Dialing Parity

(a) All local exchange carriers shall provide dialing parity for all telecommunications services that require dialing to route a call. All local exchange carriers shall permit end users within a defined calling area to dial the same number of digits to make a telephone exchange service call or telephone

service call, regardless of the identity of an end user's or the called party's telecommunications carrier.

- (b) Subject to the full implementation of section 251(e)(1) of the Act, a local exchange carrier responsible for the administration and assignment of telephone numbers shall provide access to such numbers in the same manner that it provides itself access to such numbers.
- (c) A local exchange carrier shall permit end users of any local exchange carrier operating within the same defined local calling area to access its directory assistance service and obtain a directory listing in the same manner that it permits its end user to access such service and obtain such listing. Such access shall include no unreasonable dialing delays.
- (d) A local exchange carrier shall provide all other local exchange carriers within the same defined local calling area access to its operator services on the same basis it provides such services to itself and its end users, including no unreasonable dialing delays, without charge.
- (e) For purposes of this section, the term "dialing delay" refers to the period that begins when an end user completes dialing a call and ends when a ringing tone or busy signal is heard on the line.

**.303 Charges for Transport and Termination of Traffic -- ¶ 226-244

Each local exchange carrier shall compensate any other interconnecting local exchange carrier according to one of the

following methods:

- (a) Except as provided in (b) below, local exchange carriers may charge on the basis of the net additional costs incurred by each in transporting and terminating the calls originating on the network of the other carrier, if any, with such costs calculated pursuant to long run incremental costs as defined at 47 C.F.R. § **.502, or mutually recover costs through the offsetting of reciprocal obligations, including arrangements such as bill and keep;
- (b) In any agreement involving a local exchange carrier that is not an incumbent local exchange carrier, the carrier that is not an incumbent local exchange carrier may either:
 - (1) elect to charge on the basis of the
 additional costs incurred by the incumbent
 local exchange carrier calculated using long
 run incremental costs as defined at 47 C.F.R.
 § **.502; or
 - (2) until 12 months after permanent local telephone number portability is fully implemented in the relevant service area or thirty-six months after commencement of the arrangement, whichever comes first, elect the offsetting of reciprocal obligations through arrangements such as bill and keep; or
 - (3) elect any existing arrangement entered into by the incumbent local exchange carrier for the recovery of reciprocal obligations.

SUBPART D - Duties Under Section 251(c)

**.401 Duty to Negotiate in Good Faith

- (a) Each incumbent local exchange carrier has the affirmative duty to negotiate in good faith with any telecommunications carrier that has submitted, in writing pursuant to 47 C.F.R. § **.601, a request for interconnection, access to unbundled elements, access to rights of way, conduits, ducts, poles, roof rights or equivalent facilities controlled by the local exchange carrier, collocation, resale of the incumbent's services, number portability, dialing parity, and reciprocal compensation. Good faith negotiation requires the parties to meet and confer at reasonable times and places with an honest, purposeful effort, free from any delaying tactics, to come to an agreement on the request received. Good faith requires compliance with the procedural rules contained in 47 C.F.R. § **.601 of these rules.
- (b) The duty to negotiate in good faith arises immediately upon receipt of any request made in compliance with 47 C.F.R. § **.601 of these rules.
- (c) An incumbent local exchange carrier is not negotiating in good faith if it takes any of the following actions, including but not limited to:
 - (1) the incumbent local exchange carrier asks for, or in any way seeks, a general agreement from the requesting telecommunications carrier not to disclose the contents of any negotiations to any

other carrier or to any governmental authority;

- (2) the incumbent local exchange carrier refuses to negotiate based on the assertion that the requesting carrier has not yet obtained certification from a state commission;
- (3) the incumbent local exchange carrier refuses to be subject to reasonable commercial enforcement mechanisms in the agreement, including, but not limited to mandatory arbitration, specified damages; penalties for failure to perform, or agreed-upon performance standards;
- (4) the incumbent local exchange carrier refuses to negotiate any specific term or condition proposed by any requesting telecommunications carrier;
- (5) the incumbent local exchange carrier refuses to respond to any reasonable request for technical information necessary for the requested interconnection within 7 days of receipt of the request; or
- (6) The incumbent local exchange carrier requires an admission by the requesting carrier that the requesting carrier believes that the negotiated agreement complies with any provisions of the Telecommunications Act of 1996, federal regulations, or any requirement of state law.
- (d) If an incumbent local exchange carrier fails to act in good faith it shall be subject to the mandatory penalties in

section **.700.

**.402 Interconnection - ¶ 56-65

- (a) Each incumbent local exchange carrier has the affirmative duty to interconnect with the facilities and equipment of a requesting telecommunications carrier for the transmission and routing of telephone exchange service and exchange access. The incumbent local exchange carrier shall provide the requesting telecommunications carrier with the same level of service, facilities, technical standards and rates, terms and conditions as the incumbent local exchange carrier affords to itself or to any subsidiary, affiliate or any other party to which the incumbent local exchange carrier provides interconnection.
- (b) The incumbent local exchange carrier shall interconnect on a technology neutral basis with the requesting telecommunications carrier at one or more technically feasible point(s) within the incumbent local exchange carrier's network without regard to particular transmission medium involved, i.e., digital loops, ISDN, SONET, wireless. The incumbent local exchange carrier and the requesting telecommunications carrier shall deliver traffic from its network to the point of interconnection ("POI") with the other carrier's network. The points of interconnection are to be determined in such a way as to maximize the efficient use of the requesting telecommunications carrier's network architecture without imposing a manifestly unreasonable burden on the incumbent local

exchange carrier. Any POI at which any incumbent local exchange carrier currently interconnects with any other telecommunications carrier or end user will be presumed to be a technically feasible point. Any incumbent local exchange carrier that claims that such a POI is not technically feasible shall have the burden of showing that such interconnection is not technically feasible at that point by forwarding documented justification to the requesting telecommunications carrier within 15 days of receipt of the request. Economic, administrative or logistical difficulty in satisfying an interconnection request is not an indication of technical infeasibility.

- (c) The incumbent local exchange carrier shall provide interconnection by physical collocation or virtual collocation of facilities as provided in 47 C.F.R. § **.404 below, or, at the requesting telecommunications carrier's option, interconnection may be at any mid-span meet agreed to by both carriers.
- (d) At a minimum, the incumbent local exchange carrier shall provide interconnection, at the requesting telecommunications carrier's option, at one of the following:
 - (1) the trunk side of the local switch, permitting the option of one or two-way traffic, and allowing for the consolidation of all traffic types including, but not limited to, local or toll, inter-office mileage and wireless carrier arrangements (including access to any switching centers, end offices, local tandems, access tandems, E911 routing centers), and operator services;

- (2) the loop side of the switch;
- (3) tandem facilities; or
- (4) mid-span meets.
- (e) The incumbent local exchange carrier shall provide to the requesting telecommunications carrier interconnection that is at least equal in quality to that provided by the incumbent local exchange carrier to itself or its subsidiaries or to any other carrier or to any end-user. To be equal in quality the interconnection must provide the same reliability, speed, and network transmission quality that is provided to any other interconnector. Interconnection must be subject to the same technical and quality control standards that the incumbent local exchange carrier offers to itself or its subsidiaries or to any other carrier or to any end-user. The incumbent local exchange carrier shall be responsible for the installation of, and bear the cost of, provisioning efficient and sufficient facilities to carry the traffic from the POI.
- (f) The incumbent local exchange carrier shall provide interconnection on terms and conditions that are just, reasonable and nondiscriminatory. Ordering, provisioning, service billing, installation, maintenance and repair of all facilities and equipment used for interconnection must be provided in a timely manner and in a manner that is non-discriminatory vis-a-vis facilities and equipment used solely for provision of service by the incumbent local exchange carrier. "Nondiscriminatory" means that all time intervals and quality of service are at least equal to that provided by an incumbent local exchange carrier to itself

or its subsidiaries or to any other carrier or to any end-user.

(g) Charges for the establishment and maintenance of interconnection must be just, reasonable and cost-based as required by section 252(a)(I)(A) of the Act. Each local exchange carrier shall bear its own cost incurred in construction of facilities to the point or points of interconnection. The costs of construction and maintenance of any new POI facility shall be equally apportioned between the carriers. Telecommunications carriers that are currently provided interconnection by an incumbent local exchange carrier under virtual collocation shall have the option to switch to physical collocation at no cost.

**.403 Unbundled Network Elements -- ¶¶ 74-116

- (a) Each incumbent local exchange carrier has the affirmative duty to provide nondiscriminatory access to network elements on an unbundled basis at any technically feasible point to any requesting telecommunications carrier for the provision of a telecommunications service. Unbundled network elements must be provided in such a manner that the requesting telecommunications carrier can combine such elements, either with other incumbent local exchange carrier elements, or with network elements of the requesting telecommunications carrier or any other entity, in order to provide telecommunications service.
- (b) At a minimum, an incumbent local exchange carrier shall provide access to the following network elements on an unbundled basis and subject to the following requirements:
 - 1)Local Loops: Local loop means any transmission medium provided between the end office and the

subscriber's premises.

(A) Local loops include, but are not limited, to the following:

conditioning;

- (i) at the discretion of the requesting carrier, 2 wire, 4
 wire, analog, digital, DS1, DS3,
 ISDN, provided without any degradation in the technical capabilities of the facility;
 (ii) Unbundled testing, and
- (iii) The ability to cross connect at the local switching office and at the end user's premises, access to any and all network interface devices and any riser cable, conduit or roof rights, to the extent controlled by the incumbent local exchange carrier, so that the requesting telecommunications carrier's facilities may be connected to the local loop and the end user.
- (B) The terms and conditions for provisioning local loops for requesting telecommunications carrier's end users must be at least equal to that provided to the incumbent local exchange

carrier's own end users. These terms and conditions shall be incorporated into the agreements between the requesting telecommunications carrier and the incumbent local exchange carrier and in statements of general terms and conditions filed by Bell Operating Companies. Failure to meet these terms and conditions shall be subject to penalties as described in section *.700.

- (C) The incumbent local exchange carrier shall provide additional unbundling of the local loop, including but not limited to, network interface devices, loop distribution, loop feeder and, traffic concentration points, upon bona fide request. The incumbent local exchange carrier has the burden of proving why any requested subloop unbundling is not technically feasible. Documented justification must be supplied to the requesting telecommunications carrier within 15 days of receipt of the request.
- (2) Local Switching: Local switching facilities provide the functions that route traffic or calls, perform route selection, perform testing and recording, and generate the appropriate signaling required for network maintenance and call processing.
 - (A) The incumbent local exchange carrier shall

make local switching available in such a way
that all the necessary information to complete
a call is passed between the connecting
telecommunications carriers.

- (B) The incumbent local exchange carrier shall include the requesting telecommunications carrier's network information in the routing guide and notification of any routing and rating modifications in the same manner as it provides this information to itself. incumbent local exchange carrier shall also include such information as changes in local calling areas and assignment of new NXX codes until such time as the incumbent local exchange carrier is no longer responsible for these activities. There shall be no charge for the passing of such information between carriers. Failure to do so shall subject the incumbent local exchange carrier to penalties as provided in section **.700.
- (C) The incumbent local exchange carrier shall provide other switching functionalities that may include, but not be limited to, interconnection to the port, the capability for call paths to be set up and rated, and the availability of advanced switching features such as those used in SS-7 based services and

AIN, upon bona fide request. The incumbent local exchange carrier has the burden to prove why any requested unbundled switching functionality is not technically feasible.

Documented justification must be supplied to the requesting telecommunications carrier within 15 days of receipt of the request.

- (3) Local Transport: Local transport includes end office to end office transport or intermachine trunking; end office to interexchange carriers' point of presence dedicated transport; and end office to tandem and common transport.
 - (A) The incumbent local exchange carrier shall provide local transport at a level of technical performance that is at least equal to that supplied to itself or to any subsidiary, affiliate or any other party to which the incumbent local exchange carrier provides such facilities. The incumbent local exchange carrier shall make such facilities available, at the option of the requesting telecommunications carrier, with or without electronics (i.e. dark fiber).
 - (B) The incumbent local exchange carrier shall provide the requesting telecommunications carrier with ordering, provisioning, and installation standards at least equal in quality as it provides to itself or to any

subsidiary, affiliate or any other party to which the incumbent provides local transport. Such intervals should be clearly stated in the agreement or statement of general terms and conditions. Failure to do so shall be subject to penalties as described in section **.700.

- (4) Databases and Signaling Systems: Databases include those that support call processing (e.g., LIDB and 800), and those that support non-call processing (e.g., directory assistance and billing information). Signaling systems exist independently of the call transmission and shall include all the necessary information to properly route and complete the call. Such signaling systems query databases for information relative to the call processing, e.g., LIDB queries determine if calling card use is valid and to whom the call should be billed, 800 queries determine to which carrier a given 800 call should be routed. The incumbent local exchange carrier shall provide unbundled access to all databases and signaling systems to any requesting telecommunications carriers in the same manner as it makes such access available to itself or to any subsidiary, affiliate or any other party.
 - (A) Database and signaling system unbundling shall include at a minimum: signaling links, signaling transfer points, and access to the service control points.
 - (B) The incumbent local exchange carrier shall

provide access to databases and signaling networks on a nondiscriminatory basis to the requesting telecommunications carrier such that the requesting telecommunications carrier can efficiently deploy its networks. The incumbent local exchange carrier shall provision access to databases and signaling systems in the same time intervals and at service standards at least equal in quality to that it affords itself or to any party to which the incumbent local exchange carrier provides databases and signaling systems. Such intervals shall be clearly stated in the agreement and penalties apply as described in section **.700 if intervals are not met.

(5) Ancillary services: The incumbent local exchange carrier shall provide the ancillary services described herein to requesting telecommunications carriers.

Additional services may be provided upon bona fide request. The incumbent local exchange carrier has the burden of proving why any requested additional ancillary service is not technically feasible.

Documented justification must be supplied to the requesting telecommunications carrier within 15 days of receipt of the request. For each of the ancillary services described below, the terms and conditions negotiated shall be included in any agreement or, when

relevant, in the statement of general terms and conditions. Violations shall be subject to the penalties in section **.700.

- (A) Operator services: The incumbent local exchange carrier shall provide the requesting telecommunications carrier with nondiscriminatory access to busy line verification and call interrupt on rates, terms and conditions that are at least equal to those currently provided to itself or to any party to which the incumbent local exchange carrier provides operator services.
- (B) Directory listings: The incumbent local exchange carrier shall provide with a complete listing of all the requesting telecommunications carrier's end users in its directory listings at no additional charge.
- (C) Public health and safety facilities: The incumbent local exchange carrier shall provide nondiscriminatory access to E911 system interconnection, TRS or any other public health and safety facility determined by the Commission as essential for exchange service on rates, terms and conditions at least equal to those currently provided by the incumbent local exchange carrier to itself or to any party.
- (D) Repair and maintenance: There shall be

mutual repair and maintenance reporting requirements between the incumbent local exchange carrier and the requesting telecommunications carrier. These reports shall be provided at no charge.

- (c) Incumbent local exchange carriers shall plan and design their networks such that, to the maximum extent technically feasible, any new facilities or equipment are available on an unbundled basis. Incumbent local exchange carriers that fail to implement such network architectures, as determined by the availability of unbundled network elements by other incumbent local exchange carriers, shall provide such network elements to a requesting telecommunications carrier as though such elements had been capable of being unbundled and at the same price that would have been required by such a network architecture.
- (d) If a requesting telecommunications carrier seeks access to unbundled network elements in addition to, or different from those listed in paragraph (b), the incumbent local exchange carrier must make a good faith effort to provide such network elements. The burden is on the incumbent local exchange carrier to show that it is not technically feasible to provide any network element on an unbundled basis. Documented justification must be submitted to the requesting telecommunications carrier within 15 days of request. Economic, administrative or logistical difficulty in satisfying a request for unbundled network elements is not an indication of technical in

feasibility.

(e) The incumbent local exchange carrier shall provide all unbundled network elements to requesting telecommunications carriers on rates, terms and conditions that are just reasonable and nondiscriminatory and based on TSLRIC as defined in Subpart E. In no case shall the total price of any group of unbundled network elements that combined could comprise a total service exceed the lowest resale price for that service. If such requirement is violated, the prices of the individual unbundled network elements shall be reduced according to the following formula:

The new price The old price of an individual enetwork element network element

Lowest Resale Price

x Sum of the old prices of the network elements required to provide the service

**.404 Collocation -- ¶¶ 66-73

exchange carrier that receives a request for collocation of equipment shall provide for physical collocation of equipment, including concentrating equipment, necessary for the interconnection of facilities as required in section **.402 above, and for access to unbundled network elements required in section **.403 above. The incumbent local exchange carrier shall provide such collocation in a timely manner and within the period negotiated between the incumbent local exchange carrier and the requesting telecommunications provider, and shall provide such

collocation on rates, terms and conditions that are nondiscriminatory, just and reasonable.

- If an incumbent local exchange carrier receives a request for collocation of equipment or facilities that it believes it will be unable to satisfy for technical reasons or space limitations, it must apply to the relevant state commission for a waiver of the collocation requirement within seven days of receipt of the request. If the incumbent local exchange carrier does not apply for such waiver of the collocation request within seven days, the incumbent local exchange carrier shall waive its right to do so. If the state commission finds that physical collocation is not practical for technical reasons, or because of space limitations, the incumbent local exchange carrier shall provide for virtual collocation of facilities and equipment necessary for interconnection of access to unbundled network elements. Economic, logistical or administrative problems in fulfilling a request will not be considered in determining whether there are technical reasons or space limitations preventing physical collocation. Charges for virtual collocation under this section shall be no more than the charges that would have applied had physical collocation been possible.
- (c) Within the collocation space, a requesting telecommunications carrier may interconnect with any other collocated telecommunications carrier without any restrictions imposed by the incumbent local exchange carrier.
- (d) The incumbent local exchange carrier shall not impose any special security or other arrangements including, but not

limited to cages, alarms, security escorts. Such arrangements can only be implemented if agreed to by the requesting telecommunications carrier and the charges for such arrangements cannot exceed the charges the requesting telecommunications would pay to have such arrangements installed itself.

- (e) The incumbent local exchange carrier shall not prohibit a requesting telecommunications carrier from providing its own installation, maintenance and repair of equipment in a collocation facility.
- (f) As provided in sections **.402 and **.403 above, interconnection or access to unbundled network elements may, at the option of the requesting telecommunications carrier, be accomplished either by virtual collocation or at any mutually agreed upon mid-span meet.

**.405 Resale -- ¶ 172-88

- (a) Each incumbent local exchange carrier has the duty to provide all its services for resale without restriction except as the Act provides.
- (b) The resale price of any service, whether retail, wholesale, or term-and-volume discount of any sort, may not be less than the total price of the equivalent network elements used to provide that service except pursuant to section 251(c)(3) and Rule **.403.

**.406 Notice of Changes -- ¶ 189-94

(a) Each incumbent local exchange carrier has the

affirmative duty to provide public notice to other telecommunications carriers and information service providers of changes in the information necessary for the transmission and routing of services using the incumbent local exchange carrier's facilities or network.

- (b) The public notice required by paragraph (a) shall include all information relative to the physical and technical aspects of the incumbent local exchange carrier's network that would affect the ability, or the manner in which another telecommunications carrier or information service provider would interconnect with or use the incumbent local exchange carrier's network for the provision of any service. Such notices shall also include any information on changes to the carrier's network that would affect the interoperability of those facilities and networks.
- (c) The public notice required by paragraph (a) shall include, at a minimum, the name of the incumbent local exchange carrier, a name and telephone or fax number of a person to contact for further information, the date(s) the change(s) are scheduled to occur, the location of the change(s), a general description of the technical or other change(s) that are scheduled to occur, and a brief summary of the effect that the incumbent local exchange carrier expects the change will have on other carriers.
- (d) The public notice required by paragraph (a) must be sent by first class mail to each carrier with whom the incumbent local exchange carrier has an agreement relating to interconnection,

unbundled network elements or any other agreement relevant to the proposed change. Such notice shall also be sent by first class mail to ATIS and Bellcore.

- (e) Each incumbent local exchange carrier shall also either establish its own or a shared address on the Internet where all its public notices can be accessed. Information of the Internet address shall also be provided to ATIS and Bellcore.
- (f) The public notice required by paragraph (a) shall be released a reasonable amount of time prior to the proposed change(s) are scheduled to occur. Notice that is mailed six months prior to the proposed change shall be presumed to be reasonable.

Subpart E - COST STANDARDS

**.501 Total Service Long Run Incremental Costs ("TSLRIC")

- (a) TSLRIC means the forward-looking incremental cost of the entire service (or the additional costs using only the most efficient currently available technology of some increment of output when all inputs can be varied). It is determined by calculating the difference between the total forward-looking costs of a firm that provides the particular service along with its other services, compared to the total forward-looking costs of the firm when it does not provide that service but still provides the same level of its other services.
 - (b) The following principles apply to any TSLRIC study:
 - (1) Any assumptions relating to efficient network cost